

STATE OF WASHINGTON DEPARTMENT OF AGRICULTURE

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Mr. Jim Roelofs Field & External Affairs Division Office of Pesticide Programs/US EPA Ariel Rios Building (H7506-C) 1200 Pennsylvania Avenue, N.W. Washington, DC 20460

Dear Mr. Roelofs:

This letter is a follow-up to our conversation regarding residential human exposure incidents from the use of insecticide foggers and aerosols.

You requested that we provide you with specific cases and specific label problems so that EPA could better determine what label changes might be beneficial to prevent exposure recourrences. In response to your request, the Washington Department of Health (WDOH) conducted a review of 2005 and 2006 cases to identify instances where improved labels might have prevented an over-exposure and subsequent illness or injury. Enclosed is a summary of their findings, case examples from pesticide illness surveillance, and our specific recommendations for possible changes.

Recommendations for total release foggers:

- 1. Sixty-four percent of our fogger cases over the two-year period surveyed involved a single product. We request that EPA consult their confidential production and sales information to see whether the high frequency of Raid Concentrated Deep Reach Fogger (EPA Reg no. 4822-452) is explained by market share.
- 2. If market share does not explain the frequency of cases, we request that EPA investigate possible reasons for increased risk with this product (e.g, higher percentage of cypermethrin in this concentrated product (1.716%), large volume of space treated by each can (7,000 cu ft) resulting in common overuse).
- 3. For all foggers:
 - Reduce fogger package size so that each treats only 1000 ft (10x12x8ft room). Some foggers treat up to 10,000 cu ft. This leads to dramatic overuse when fogger labels permit one per room (Appendix 2).
 - Add a packaging device to allow manual deactivation of fogger if accidentally activated.
 Ensure that such a device permanently disables the fogger to prevent intentional partial use of cans.
 - Add a visual cue like a red ring around the release hole. Some users are assuming that the spray comes out the side like an aerosol.
 - Safety proof the activation button so children can not activate (e.g., twist the cap to line up arrows with the body of the can). Ship and stock all cans with the arrows in lock position.



- Improve label language which states "...leave the treated area." This is often misunderstood to mean leave the treated room. Moving to an adjacent room with the door closed does not provide adequate respiratory protection, especially for sensitive individuals. Consider the phrase "...leave the premises."
- Make warning statements more prominent. People do not seem to understand that foggers can make them ill or pose life threatening reaction for asthmatics and other individuals with respiratory impairment. Consider adding:
 - "Breathing fog can make you and your pets sick leave premises immediately after activating, wait 4 hours, then open windows and ventilate the area before reoccupying."
 - "Breathing this product may trigger breathing difficulty in asthmatics and others with respiratory conditions. Keep sensitive people away from treated area until fully ventilated."

Recommendations for aerosol insecticides:

- 1. Add a warning to remove children from room before spraying aerosol.
- 2. Add warnings about respiratory symptoms in sensitive subpopulations (i.e., people with asthma, Chronic Obstructive Pulmonary Disease, Reactive Airways Disease, or other respiratory impairments).
- 3. Add a childproof device to prevent accidental spraying.
- 4. Add a visual arrow on the top of the can pointing to the direction of spray release. Users are pressing the button when the nozzle is pointed at their face.
- 5. Review Table 1 for possible improvements on specific label such as adding PPE requirements, improving re-entry and ventilation instructions, and cautioning users about spraying aerosols repeatedly or in enclosed spaces.

Finally, we encourage EPA's ongoing efforts to educate consumers about alternatives to foggers and aerosol insecticides for the control of fleas, cockroaches, ants, and flying insects. This is especially important for individuals who are at increased risk of adverse health effects.

We appreciate your consideration of our recommendations and look forward to your response,

Sincerely,

Ann Wick

Program Manager

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Enclosures